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Drinkwater, Stephen; Ingram, Peter

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How Different are the British in their Willingness to Move? Evidence from International Social Survey Data

STEPHEN DRINKWATER* and PETER INGRAM+

Corresponding author

* Department of Economics, University of Surrey, Guildford, Surrey, GU2 7XH, UK;
WELMERC, University of Wales Swansea, UK;
IZA, Bonn, Germany.
Email: s.drinkwater@surrey.ac.uk

+ Department of Economics, University of Surrey, Guildford, Surrey, GU2 7XH, UK.
Email: p.ingram@surrey.ac.uk

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ABSTRACT

Our paper analyses people's willingness to move (WTM) using data from the 1995 British Social Attitudes Survey and International Social Survey Programme. We identify the personal characteristics and sub-regional indicators that are important in explaining the WTM within Britain. We also find that the WTM is only higher in a few other countries, including the United States. The equivalent desire to move is found to be much lower in Eastern European countries and in several other European Union member states. Compositional effects, such as age and education, are generally important in explaining differences in attitudes towards migration in comparison to other Western economies. However, structural effects such as institutions, history and culture tend to play a more dominant role in explaining differences compared to countries in Central and Eastern Europe.

JEL Classifications: J61, R23.

Keywords: Great Britain; willingness to move; international differences, microdata.

Les différences entre les britanniques dans leur consentement à la mobilité – Résultats d'une enquête sociale internationale

STEPHEN DRINKWATER et PETER INGRAM

RESUME

Nous analysons le consentement à la mobilité (WTM) des Britanniques en utilisant les données d'une enquête sur les comportements sociaux des Britanniques et d'une enquête sociale internationale de 1995. Nous identifions les caractéristiques personnelles et les indicateurs subrégionaux qui sont importants pour expliquer le consentement à la mobilité en Grande-Bretagne. Nous constatons également que le WTM n'est supérieur que dans un petit nombre de pays, notamment les États-Unis. Le désir équivalent de mobilité est beaucoup moins important dans les pays d'Europe orientale et dans plusieurs Etats membres de l'Union européenne. Les effets de la composition, comme l'âge et l'éducation, sont généralement importants pour expliquer les différences de comportement envers la migration, en comparaison avec d'autres économies occidentales. Toutefois, des effets de structure comme les institutions, l'histoire et la culture ont tendance à jouer un rôle plus important pour expliquer les différences comparées avec des pays d'Europe centrale et orientale.

Classifications JEL : J61, R23.

Mots-clés : Grande-Bretagne; consentement à la mobilité, différences internationales, microdonnées

Wie unterschiedlich fällt die Umzugsbereitschaft unter den Briten aus? Belege aus dem International Social Survey

STEPHEN DRINKWATER and PETER INGRAM

ABSTRACT

In unserem Beitrag analysieren wir die Umzugsbereitschaft anhand von Daten aus dem British Social Attitudes Survey und dem International Social Survey Programme von 1995. Wir identifizieren die persönlichen Merkmale und subregionalen Indikatoren, die zur Erläuterung der Umzugsbereitschaft innerhalb von Großbritannien von Bedeutung sind. Ebenso stellen wir fest, dass die

Umzugsbereitschaft nur in wenigen Ländern (darunter den USA) höher ausfällt. Die entsprechende Umzugsbereitschaft liegt in osteuropäischen Ländern sowie in mehreren anderen Mitgliedsstaaten der EU deutlich niedriger. Bei der Erklärung der unterschiedlichen Einstellungen zur Migration im Vergleich zu anderen westlichen Ökonomien spielen kompositionale Effekte wie Alter und Bildung in der Regel eine wichtige Rolle. Zur Erklärung der Unterschiede im Vergleich zu den Ländern in Mittel- und Osteuropa sind hingegen meist die strukturellen Effekte, wie z. B. Institutionen, Geschichte und Kultur, von größerer Bedeutung.

JEL Classifications: J61, R23.

Keywords:
Großbritannien
Umzugsbereitschaft
Internationale Unterschiede
Mikrodaten

¿En qué medida son diferentes los británicos en la movilidad voluntaria? Ejemplos de datos de estudios sociales internacionales

STEPHEN DRINKWATER and PETER INGRAM

ABSTRACT

Con datos recabados del Estudio británico de actitudes sociales y el Programa Internacional de Estudios Sociales de 1995, en este artículo analizamos la movilidad voluntaria de las personas. Identificamos las características personales y los indicadores subregionales que son importantes para explicar la movilidad voluntaria en el Reino Unido. También observamos que la movilidad voluntaria es sólo superior en unos pocos países, por ejemplo en los Estados Unidos. Vemos que el deseo equivalente de desplazarse es mucho menor en los países de Europa del este y en otros estados miembros de la Unión Europea. Los efectos de composición social, tales como la edad y la educación, son generalmente importantes a la hora de explicar las diferencias en actitudes hacia la emigración en comparación con otras economías occidentales. Sin embargo, los efectos estructurales, como son las instituciones, la historia y la cultura, tienden a desempeñar un papel más dominante al explicar las diferencias en comparación con otros países de Europa central y del este.

Keywords:
Gran Bretaña
Movilidad voluntaria
Diferencias internacionales
Microdatos

JEL Classifications: J61, R23.

"I grew up in the 1930s with an unemployed father. He did not riot. He got on his bike and looked for work, and he went on looking until he found it".

Norman Tebbit, Employment Secretary, Summer 1981

INTRODUCTION

The quote by Norman Tebbit from 1981 was to become an employment narrative that stayed with him thereafter. This reflected one of the Thatcher government's views towards unemployment - people were not readily prepared to move to find work. The comment encapsulates some of the issues that we hope to examine in this paper, namely the factors that influence an individual's willingness to move (WTM) within Britain to improve their personal circumstances and also how the WTM compares with that of people from other countries. Although this is a very specific reference to the potential importance of internal migration as a mechanism through which the impact of economic shocks can be reduced, internal migration has also been identified as a key element of labour market flexibility (EICHENGREEN, 1993; PENCAVEL, 1994).

Despite the fact that unemployment in Britain is currently relatively low by recent historical standards, the ability to respond to economic shocks remains important, especially because the very nature of business cycles implies that economic conditions fluctuate and are likely to deteriorate in the future. In particular, at times of high unemployment, migration flows become important since the jobless (especially the low skilled) may be able to find work or receive better returns to their labour supply by moving to more prosperous areas. However the impact of any recession on migration may depend on variations in the spatial incidence of such economic downturns. In addition, there may also be a larger difference between the desire to

move and observed migration in an economic downturn. This is because migration rates typically decline in a recession, whereas the desire to move may increase but remain unfulfilled.

Although spatial unemployment differences have narrowed in recent decades, large income and wage differentials, as well as differences in employment rates due to differential rates of economic inactivity, currently exist across Britain and internal migration should help to reduce these disparities.[1] In particular, BORJAS (2001a) notes that migration and economic efficiency are closely linked in a competitive economy since the migration of workers from a low wage to a high wage region will bring about convergence in workers' value of marginal products in the two regions. BARRO and SALA-I-MARTIN (1991) and BLANCHARD and KATZ (1992) provide some empirical evidence that migration has reduced regional income and employment differentials in the United States (US). However, despite the relatively large internal migration flows in the US, BORJAS (2001b) argues that these movements are insufficient to ensure the rapid elimination of income differentials.

It has also often been argued (e.g. PENCAVEL, 1994; EICHENGREEN, 1993; HUGHES and MCCORMICK, 1987) that the level of internal migration in the Britain and other European countries is too low, especially when compared to the US. It follows that given the smaller volume of migration in Britain, then it will take far longer to remove regional differentials (PISSARIDES and MCMASTER, 1990). Moreover, labour mobility also varies across different types of individual, with those holding manual occupations being the least mobile, according to HUGHES and MCCORMICK (1987), despite this group experiencing the highest unemployment rates. In particular, they estimate that the rate of inter-state job-related migration

amongst US manuals was 18 times higher than the equivalent rate of inter-regional manual migration in Britain.

Given the importance of migration to labour market flexibility and the performance of local and regional labour markets, it is important to be able to compare how internal migration rates differ across countries. However, there is relatively little evidence available on international differences in migration within countries. The OECD does periodically publish figures on internal migration rates by collating data from national statistical agencies (e.g. OECD, 1990; OECD, 2000) but there are several problems with using these data. These include that the rates have only been published for a relatively small number of countries (e.g. 11 in 1990 and 17 in 2000). Comparisons of internal migration rates between countries are further complicated by the fact that rates are reported between areas of different sizes and significance by country since they normally relate to the administrative units that exist there.[2] Moreover, comparisons across different demographic groups are seldom presented and there is also variation in the information reported by country.[3] As a result of these problems, there have been relatively few studies which have attempted to examine differences in internal migration patterns between countries.

There are however a few notable exceptions, some of which compare migration between several countries. These include VAN DIJK *et al.* (1989), who analyse migration in the Netherlands and the US, whilst BELL *et al.* (2002) examine differences in migration between Australia and the UK and LONG *et al.* (1988), who contrast the situation in the UK, US and Sweden. REES and KUPISZEWSKI (1999) undertake a more extensive exercise by documenting internal migration patterns in 10 European countries using administrative and Census data. LONG (1991) also compares overall internal migration rates across a range of mainly developed

countries. Our paper takes a different approach by analysing differences in the WTM between countries using a consistent set of questions from a cross-national dataset. This dataset also has the advantage of containing information on some developing and Central and Eastern European countries.

The aims of this paper are therefore to identify the factors influencing an individual's WTM within Britain and to compare the WTM of Britons with those of individuals from other countries. We place particular emphasis on the extent to which these differences can be explained by observable personal characteristics and how much of the remaining difference is unexplained, potentially reflecting cultural or institutional differences. For the British data, we are also able to examine the influence of sub-regional labour and housing market conditions. The questions that are analysed in our study also allow the attitudes of individuals towards moving over different distances to be examined, thus enabling the effect of characteristics on prospective moves of varying distances to be explored.

DATA

The datasets used in this paper are the 1995 *British Social Attitudes Survey (BSAS)* and the *International Social Survey Programme (ISSP)*. The *BSAS* is a representative sample of adults aged 18 and over living in private households in Great Britain.[4] The *BSAS* forms the British entry to the *ISSP*, which is a cross-national data set that collects information on a particular issue each year. In 1995, respondents were asked a series of questions associated with national identity and migration.[5] Since similar data were obtained from 22 other countries (East and West Germany could still be separately identified), it is therefore possible to use this dataset to compare the WTM of Britons with those of individuals from other countries using a consistent set of

questions. Given that more detailed information is available in the *BSAS* compared to the information on British respondents in the *ISSP*, especially in terms of spatial identifiers, the *BSAS* is also used separately in the regression analysis. Inspection of the *BSAS* data also reveals that only around a third of respondents were asked the WTM questions.[6] Furthermore, since we are interested in labour migration, we constrain our data to include those individuals aged between 18 and 64 and this reduces the useable sample to less than 800 observations from Britain.

Table 1 provides an international comparison of the WTM within the respondent's own country using the *ISSP*. This information is collected for a number of different distances since respondents were asked how willing they would be to move away from their neighbourhood/village, town/city and county (or corresponding area in the country) if they could improve their living or working conditions.[7] The responses were given on a five-point scale, recoded so that a higher value indicates a greater WTM.

< Table 1 around here >

The first point to note from the table is that the WTM declines the further the prospective move is within each country, which is consistent with actual studies of migration that find that mobility decreases with distance. It is also noticeable that there is a high degree of consistency in the ranking of the countries' average WTM at the neighbourhood, town/city and county/equivalent area levels. This is despite the fact that the third internal level (i.e. county for Britain) is different within each country and will therefore relate to a different area in terms of size.[8] Even though it has been argued that the migration of Britons could be much greater, the statistics in Table 1 place Great Britain amongst those countries whose residents display a relatively high average WTM. More specifically, Britons are ranked sixth, fourth and

fifth in terms of their average WTM neighbourhood, town/city and county respectively. Respondents from the US had the highest WTM at each of these three levels. This is in accordance with actual migration figures which indicate that the US has the most flexible and integrated national labour market (PENCAVEL, 1994). Canadians and the Dutch also display a relatively high WTM.[9] The lowest WTM is observed in the former Soviet republics of Russia and Latvia. Respondents from other East European countries such as Hungary, Slovenia, the Czech Republic and Bulgaria also display a relatively low WTM within their own country. The WTM within some European Union (EU) member states such as Austria and Ireland is also relatively low.

Before analysing the factors that are expected to influence the WTM, it is important to establish the link between migration attitudes and migration outcomes. The most obvious way of doing this would be to compare actual migration rates and expressed preferences regarding migration across countries, however this is difficult given the heterogeneous nature of aggregate data on internal migration in different countries. Nevertheless, it is possible to identify some consistencies between the WTM figures reported in Table 1 and the internal migration statistics reported by the OECD and other studies. Most notably, migration rates are highest in the US and respondents from the US report themselves to be the most willing to move in the *ISSP*. LONG *et al.* (1991) provide further confirmation of the high migration rate that exists in the US by international standards. Those countries with high migration rates, according to the OECD, also feature well up the WTM rankings, with Sweden, Norway, New Zealand and the Netherlands all ranked in the top 10 in terms of their respondents' WTM. The OECD reports low internal migration rates for Eastern European countries such as the Czech Republic, who also have relatively low WTM

rankings in Table 1. The migration typology presented in REES and KUPISZEWSKI (1999) is also consistent with the WTM rankings shown in Table 1 since they identify the UK, the Netherlands and Norway as high migration intensity countries and Italy, Poland and the Czech Republic as low migration intensity countries. They also note a very low internal migration rate in Estonia, which accords with the low WTM seen in Latvia and Russia. In contrast, LONG (1991) notes that migration rates are relatively high in the US, Canada and New Zealand and much lower in Austria, Ireland and Japan, which is again consistent with the information presented in Table 1.

There is also strong evidence to suggest that individuals who have a more favourable attitude towards migration are more likely to move. For example, BOHEIM and TAYLOR (2002) examine longitudinal data from the British Household Panel Survey and find that the actual propensity for moving was around three times higher for respondents who had expressed a preference for moving as compared to those who did not express such a preference in the previous wave. GORDON and MOLHO (1995) also report evidence from a survey of actual and potential British migrants in 1980 that at least 90 per cent of the potential migrants moved within five years, of whom around a half moved within a year. Furthermore, there is a substantial body of evidence to suggest that the impact of personal characteristics is also consistent with actual studies of migration – see Section 4 for a list of such studies**.** Thus we follow BURDA *et al.* (1998) who argue that intentions should be viewed as a monotonic function of the underlying variables that drive the motivation to migrate. The following section focuses on the influences on migration decisions, which can then be used to inform on the variables to include in the estimation of the WTM models.

THEORETICAL BACKGROUND

In terms of understanding the socio-economic factors that underlie the decision to migrate, perhaps the most important contribution has been provided by the human capital model, which was initially developed by SJAASTAD (1962). Therefore, in the discussion that follows, the human capital framework will be used to consider the impact of certain personal characteristics on migration.

The human capital model views mobility as an investment decision, in which costs are borne in the initial period(s) and returns accrue over time. In this model, the costs of migration can be explicitly incorporated into the potential migrant's decision making process as follows:

$$V_{AB}(t) = \int_{t_0}^{T} e^{-\rho t}(W_B(t) - W_A(t) - N_{AB}(t))dt - C_{AB}(t_0) \ , \qquad (1)$$

where V_{AB} is the present value of the net benefit of moving from region A to region B, where B is the more prosperous region. The *W*'s are the expected income levels in the two regions and ρ the subjective rate of time preference or discount rate. The costs of migrating from the lower wage region A to higher wage region B are split into pecuniary costs (C_{AB}) and non-pecuniary costs (N_{AB}). C_{AB} consist of the direct costs of migration such as moving possessions to a new location, whilst N_{AB} are often referred to as the indirect or psychic costs of migration since they involve the costs associated with moving away from friends, family and familiar surroundings. Time (t) runs from the current period (t_0) to the period that individuals stop working (T) - this could be retirement or a shorter period of residence. In this framework, the individual will migrate if $V_{AB} > 0$ and if more than one possible destination offers a positive net benefit then they will choose the location that offers the highest net benefit. It is

assumed here that C_{AB} are only incurred in the initial period but N_{AB} can persist (but probably decay) over time. Evidence of the latter is provided by VANDERKAMP (1971) who suggests that one of the main reasons for return migration is that psychic costs are higher than initially expected.

Given the nature of the questions that we use, which assume that opportunities are available elsewhere, we do not consider the existence of search costs within this context. Moreover, the wording used in the questions also implies that the financial costs aspect of a prospective move may also be of lesser important in this context. Thus we primarily focus on the impact of psychic costs in the migration process. GORDON and MOLHO (1995) build on the psychic costs argument and emphasize the duration dependence of staying in a particular location.

The human capital model has been used to explain the selective nature of migration and to emphasize the importance of characteristics in the migration process, especially in relation to their impact on psychic costs. As a result, this implies that it is important to examine the effect of personal characteristics, especially as this will guide us as to which variables to include in the regression models. Firstly, migrants tend to be young since not only should they enjoy the greatest potential returns from a human capital investment, because they have a longer period over which they can accrue the benefits and pay back the pecuniary costs, but one might also expect N_{AB} to be lower for young people since they are likely to have looser ties with their communities because more is invested in friends and family during the process of ageing (SCHWARTZ, 1973). Secondly, DE JONG *et al.* (1996) argue that there may be gender differences in intentions to move because of traditions such as men being motivated to move by employment and income considerations and women by a desire to create or reunite a family. Although they also note that changes in gender roles

within the household in developed countries over time are likely to have reduced such differences.

Those with families are also expected to be less likely to migrate. This is because, in addition to the increased financial costs of a move, the psychic costs for individuals with families are also likely to be higher as its more likely that one of the family members will not adjust to life in the new location and because families may have established more ties in their current area of residence. Migration also tends to increase with the level of education that an individual has. In addition to the greater expected financial returns to migration for the more highly qualified, given that many well qualified individuals will have studied away from home e.g. at a school or university outside their locality then they may have already severed some of their ties - thereby reducing their psychic costs and making them more prepared to migrate.

As with financial costs, the psychic costs of a move should increase with distance. For example, long distance migration also tends to increase N_{AB} because migrants are further away from their friends and family. For example, GRANT and VANDERKAMP (1976) found that Canadian inter-regional migrants required additional income greatly in excess of the pecuniary marginal cost of migrating in order to induce them to migrate an additional mile. This also explains why individuals often engage in long distance commuting rather than bearing the full costs of migration. There is also evidence to suggest that the adverse effects of distance on migration are diminished for educated individuals (SCHWARTZ, 1973).

Apart from these individual characteristics, the migration literature has also focused on the effect that the housing market and conditions prevailing in local labour markets may have on the migration decision. In terms of housing, OSWALD (1996) argues that compared to those living in private rented accommodation, migration is

lower for owner occupiers because of the higher financial and psychological costs of moving that they normally incur. HUGHES and MCCORMICK (1981) also suggest that council house (social) tenants are less likely to move longer distances (outside of their local authorities) because of the institutional arrangements that local authorities use to allocate housing. House prices may also be expected to have an impact on migration since individuals may be less inclined to move to areas where house prices are higher. However, THOMAS (1993) notes that this may not be the case for job-to-job movers, who may be more concerned with nominal wage differences rather than house prices. Moreover, the extent to which housing circumstances will affect an individual's WTM is unclear and it is a matter that we will go onto explore in our empirical analysis.

Local labour market conditions also influence the migration decision. For example, JACKMAN and SAVOURI (1992) develop a theoretical model to show that increased employment opportunities at the regional level boost net migration. In addition, PISSARIDES and MCMASTER (1990) discuss the importance of relative wages at the regional level as a determinant of migration. However, the availability of suitable jobs in particular areas is likely to vary according to skill level. In particular, people with certain skills may have to move further because employment opportunities may not be as common in their chosen fields as they are for unskilled workers. On the other hand, individuals with lower skills may face the prospect of moving longer distances because they may be confronted with less employment opportunities more generally compared to more skilled workers.

In addition to these influences, migration can also be affected by a range of other factors. For example, VAN DIJK *et al.* (1989) examine the impact that institutions can have on migration. They note that the differing influence of labour

market institutions across countries has received little attention in the literature. They attempt to remedy this by examining the impact that the different institutional arrangements that exist in the US and the Netherlands have on migration efficiency. It is found that institutions do play a role in the efficiency of migration and also produce different responses to local or macro labour market conditions. Cultural differences could also explain variations in migration rates across countries. BORJAS (1999) argues that family considerations, tradition and language differences could explain the lower migration rates of individuals from certain countries. Apart from language differences, these cultural influences are also likely to affect internal migration rates between different countries. For example, GIULIANO (2006) finds that culture plays a major role in explaining differences between Western European countries in the proportion of young adults who live at home with their parents.

ECONOMETRIC METHODOLOGY

Econometric models of an individual's movement intentions or their WTM have been estimated by several authors, including AHN *et al.* (1999) for Spain, BURDA *et al.* (1998) for Germany, FAINI *et al.* (1997) for Italy, YANG (2000) for China, DE JONG *et al.* (1996) for Thailand and HUGHES and MCCORMICK (1985) and GORDON and MOLHO (1995) for Great Britain. Most of these studies estimate dichotomous dependent variable (i.e. logit or probit) models but given the categorical and ordered nature of the WTM variable, these are not appropriate in the current context. Instead, an ordered probit model may be suitable but given that an individual's actual migration decision rather than their WTM is unobserved since they state their WTM on a five-point scale then we use Ordinary Least Squares (OLS) regressions.[10]

We estimate three different specifications, mainly because of differences in the data available in the *BSAS* and *ISSP*. In terms of the cross-country comparisons, the set of explanatory variables contains only a relatively small number of control variables. This is the case because of the need to use a consistent set of variables for all countries. Therefore the covariates mainly comprise of a standard set of personal characteristics, especially those identified in the previous section as potentially important influences on migration preferences and decisions. Thus the models include controls for gender, age, marital status, household size, employment status and education. The length of residence in the respondent's current town or city is also included because of the importance of this variable in previous empirical studies (GORDON and MOLHO, 1995; HUGHES and MCCORMICK; 1985; PICKLES *et al.*, 1982). Thus the first specification just includes basic personal characteristics. Means of the explanatory variables are reported in Table A1 in the Appendix.

Ideally, one might like to include a greater range of control variables. For example, authors such as MINCER (1978) have emphasized the importance of the household in the migration process. Unfortunately, the *ISSP* does not contain very detailed information at the household/family level, so it is only possible to control for marital status and household size on a consistent basis across countries. This relatively parsimonious specification does however reduce the problems associated with endogeneity and multicollinearity that may affect some of the explanatory variables.

However, given that the *BSAS* contains a wider set of variables than are included in the *ISSP*, as well as containing detailed spatial identifiers, it is therefore possible to control for a wider set of factors using only the British data. In terms of personal and household characteristics, we can also include ethnic group and housing

tenure dummies, whilst to further control for housing market influences, we add county level house prices in specification 2.[11] Similarly for the labour market factors, we include variables indicating county-level differences in wages, the unemployment-vacancy ratio and the economic activity rate.[12] Finally, we control for the influence of other spatial factors in specification 3, namely the population density rate for the ward that the individual lives in and their perception of crime in the local area, to examine the sensitivity of the labour and housing market variables. Since aggregate variables have been included, conventional standard errors may no longer be appropriate because the residuals are not independent and the standard errors are likely to be biased downwards (MOULTON, 1986). Therefore standard errors that correct for the common component in the residuals are reported in specifications 2 and 3.

The econometric estimates report an individual's WTM to another location within their own country at the two longer distances presented in Table 1 i.e. prospective moves from the individual's own town/city and county/equivalent area. This has been done because only longer distance moves are likely to have an impact on labour market flexibility. Moves from the neighbourhood are more likely to be for housing reasons or because of the desire to move from a specific area (BOHEIM and TAYLOR, 2002). The use of estimates relating to the WTM town/city have the advantage of being directly comparable across the countries in the dataset, whilst the estimates for county or equivalent areas are more likely to be affected by the varying sizes of geographical areas that the prospective move relates to, across the different countries.

To summarize the differences between the countries, decomposition analysis is undertaken to determine how much of the observed difference in the WTM between Britain and the other countries in the *ISSP* can be explained by individual

characteristics using specification 1 (excluding the regional and ethnic group dummies) and how much remains unexplained. The approach is based on the original framework developed by OAXACA (1973) and uses the OAXACA and RANSOM (1994) weighting matrix to overcome the index number problem. Specially, the difference in the average WTM between Britons and residents from other countries can then be decomposed as follows:

$$\bar{y}^{GB} - \bar{y}^{C} = [\hat{\beta}^{*}(\bar{x}^{GB} - \bar{x}^{C})] + [\bar{x}^{GB}(\hat{\beta}^{GB} - \hat{\beta}^{*}) - \bar{x}^{C}(\hat{\beta}^{C} - \hat{\beta}^{*})] \quad (2)$$

where the GB superscript relates to Great Britain and the C subscript to the comparison country, therefore $\bar{y}^{GB}$ and $\bar{y}^{C}$ are the average levels of the WTM in Great Britain and the comparison country respectively and likewise $\bar{x}^{GB}$ and $\bar{x}^{C}$ are the average characteristics in each country. $\hat{\beta}^{*}$ is obtained by taking a weighted average of the least squares estimates from the individual WTM equations. Therefore, the first term in square brackets in (2) refers to the part of the average WTM difference that can be explained by differences in observable characteristics between individuals in Great Britain and each comparison country. The second term in square brackets in (2) is the contribution of the differences due to coefficients.

Following O'LEARY *et al.* (2005), who analyse regional differences in labour market outcomes in the UK, the characteristic and coefficients components can be thought of as compositional and structural effects respectively. This is because differences in the WTM between individuals from different countries are partly due to differences in the make-up of each country's population (the compositional effect), whilst the remainder is accounted for by the extent to which otherwise identical individuals differ in their WTM (the structural effect). O'LEARY *et al.* (2005) argue that structural effects are made up of cultural factors that have a specific regional

dimension as well as demand side influences. Therefore, in this context, the structural component will capture country-specific influences, once differences between individuals have been netted out.

RESULTS

Table 2 reports estimates for the WTM within Britain based on the three specifications discussed above. As a consequence of the relatively small sample size, some of the estimated coefficients reported in Table 2 do not reach the commonly used levels of significance. However, many of the findings are consistent with the earlier theoretical discussions and there are also some interesting differences between the models. For example, it can be seen that as the distance of the potential move increases so the influence of personal characteristics appears to become more important. This can be seen from the better fit of the models, as measured by the R-squared statistics using Specification 1, as the distance of the prospective move increases. This suggests that the importance of personal characteristics increases for longer distance moves in Britain.

< Table 2 around here >

Considering firstly specification 1, which just includes personal characteristics, it can be seen that females are less willing to move after controlling for other influences. However the gender difference reaches only the margins of significance at the 10 per cent level (p-value of 0.147) for moving to a different town/city and but is significant at the 5 per cent level for moves to a different county. Younger people are more willing to move but the age dummies only have a significant effect in the WTM town/city model. In terms of marital status, widows/divorcees view migration a more attractive proposition than married people,

which for prospective moves at the town/city level is significant at the 10 per cent level. Household size and ethnic differences are not significant for either of the distances.

The qualifications dummies are not significant for prospective moves over the shorter distance. However, the impact of the qualification dummies increase substantially as the distance of the prospective move increases and the coefficients attached to the degree and A-levels dummies in the WTM county regression are positive and highly significant. This indicates that those with qualifications are far more prepared to move longer distances, which is consistent with empirical models of inter-regional migration (PISSARIDES and WADSWORTH, 1989; BOHEIM and TAYLOR, 2002). In accordance with the results of GORDON and MOLHO (1995), it is found that Scottish residents are least willing to move. Although the only significant regional effect in the WTM town/city model concerns the more favourable attitude towards migration displayed by individuals living in the North West compared to those living in Scotland. For the WTM county model, the WTM is significantly higher at the 10 per cent level in the North West and Greater London than in Scotland and at the 5 per cent level in the North. In each of these regions the unemployment rate was above the national average in 1995 and was highest of all in the North, at almost 11 per cent. However, to explore the impact of spatial economic conditions further we use the more detailed geographical information contained in the *BSAS* by replacing the regional dummies with several labour and housing market variables in specification 2.

Despite the significance of some of the coefficients on the aggregate labour market variables, their inclusion does not tend to have much of an impact on the estimates or significance levels of the personal characteristics. As might be expected,

individuals living in counties with poorer job prospects, as measured by the unemployment-vacancy ratio, display a significantly higher WTM. This difference is significant at the 10 per cent level in the WTM town/city model and at the 5 per cent level in the WTM county model. Perhaps surprisingly, it is found that individuals living in counties where average wages are higher are also more willing to move, significantly so in both models. In contrast, individuals living in counties with higher house prices display a significantly lower WTM. Although insignificant, the activity rate in the county where the individual resides has a positive impact on their willingness to move. This is consistent with the findings of DRINKWATER and BLACKABY (2004), who report that migration rates are by far the lowest in areas with the highest levels of economic inactivity, such as the South Wales Valleys.

Specification 2 also includes housing tenure dummies. In line with the findings of HUGHES and MCCORMICK (1985) and GORDON and MOLHO (1995), it can be seen that individuals living in private rented accommodation view migration more favourably than owner-occupiers. However, this difference is not significant in either of the models, despite the large differences that are observed in the raw data.[13] This implies that controlling for factors such as age and education reduces the impact of this variable. In addition, it should be noted that some of the other explanatory variables in the models are correlated with the housing tenure dummies. This particularly relates to the variable that indicates the length of time an individual has been in the town where they currently reside given that private renters are likely to have moved more recently. As found by HUGHES and MCCORMICK (1985), social housing tenants display a higher WTM over shorter distances but a lower WTM over longer distances, but neither of these differences is significant in our models.

Specification 3 adds other area characteristics to observe how sensitive the estimates reported in specification 2 are to the inclusion of population density and the individual's assessment of the level of crime in their area. The coefficient on population density is significant at the 5 per cent level in the WTM town/city model and at the 1 per cent level in the county model. Although the perception of crime dummies are correctly signed, they do not have a significant impact on an individual's attitude towards migration.[14] Furthermore, the inclusion of these variables has the effect of reducing the impact of average wages and house prices since they are no longer significant in the WTM county model and only the latter is significantly different from zero at the 10 per cent level in the WTM town/city model. This is because high income areas are often located in cities, which also have higher population densities and levels of crime. In contrast, the employment variables continue to exert an influence on the WTM county since the unemployment-vacancy ratio is significant at the 10 per cent level and activity rate becomes significant at the 5 per cent level.

Turning our attention to comparing the WTM in Britain with that in other countries, we firstly discuss the regression estimates which are presented separately for each country in Tables A2 and A3 in the Appendix since this will aid the interpretation of the decomposition results. These tables reveal that the estimates for each country display some consistent patterns, with 16-29 year olds, unmarried people, graduates and people with shorter periods of residence displaying the highest WTM in virtually every country in both the WTM town/city and county/equivalent area models.

However, the magnitude and significance of these coefficients does vary by country. For example, although in general more educated people display a far higher

WTM, this effect is less noticeable in many Central and Eastern Europe countries. In particular, there is no significant difference between the WTM longer distances of graduates and those with no qualifications in the Czech Republic, Hungary, Latvia, Poland, Russia and the Slovak Republic. In fact for Russia and Latvia, the coefficient attached to each of the qualifications dummies is negative in comparison to those with no qualifications and Russian graduates have a significantly lower WTM town/city. In contrast, only in Ireland and Norway amongst the 'Western' countries is the difference between the WTM county/equivalent area of graduates and individuals with no qualifications insignificant.

There are also some other noteworthy findings amongst the variables which display less consistent patterns across countries. These include that the female dummy tends not to be significant in most countries despite the fact that it is for Britain. Canada is the only other country in which gender has a significant effect in both models. The unemployed dummy also tends to be insignificant for most countries and is also negative in some. However, there are some exceptions, with unemployed respondents in Spain and Ireland reporting a significantly higher WTM in both models.

Table 3 summarises the cross-country differences by reporting the results of decomposing WTM differences between Britain and the 22 other countries into the compositional and structural effects. It can be seen from the table that the compositional effect accounts for a fairly high percentage of the differential between Britain and those countries that display a higher WTM, although there are some variations depending on which model is being examined. For example, just over a third of the differential in the WTM town/city compared to the US can be explained by individual characteristics but this rises to over two-thirds for the WTM

county/state differential. The difference in the results for the two models is most likely due to the improvement in the relative fit of the WTM county model for Britain in comparison to WTM town/city model and the equivalent models for the US and other countries, as shown in Tables A2 and A3. The overwhelming majority of the differential with the Netherlands can be attributed to compositional influences in both models, whilst characteristics are also important in explaining the differential with Canada, especially for the WTM county/province. Therefore, although structural factors account for some of the WTM differences, compositional factors are important in accounting for why British residents are more reluctant to move than individuals in these countries.

< Table 3 around here >

Compositional factors are also important in explaining why Britons are more willing to move than individuals in some of those countries where the average WTM is lower. For example, the compositional effect explains more than a half of the differential with respect to some countries, including Austria, Ireland, Italy, Spain and Germany. Meanwhile, the WTM differential compared to many of the Central and Eastern European countries is mainly accounted for by structural factors. For example, less than a third of the differential with Hungary, Latvia and Russia can be explained in each of the models. Given the earlier discussion of the country specific results, it appears that differences in attitudes towards migration of the more educated between countries in the West and in Central and Eastern Europe seems relevant in this regard. By contrast, a possible institutional explanation is housing since GHATAK *et al.* (2004) argue that a shortage of suitable housing is an important factor in accounting for the low levels of internal migration in Eastern European countries such as Poland. Furthermore, ANDRIENKO and GURIEV (2004) suggest

that labour mobility may be lower in countries such as Russia because of historical factors including the restrictions on mobility imposed by past Communist governments.

CONCLUDING COMMENTS

Internal migration remains integral to labour market flexibility, especially as an adjustment mechanism during economic downturns. However, despite the potentially beneficial effects of migration, it is generally thought that migration rates are too low in Britain, especially in comparison to countries such as the US. This paper has also shown that, consistent with this fact, the willingness to move (WTM) in Britain is lower than it is in some countries, including the US. However, it has also been found that the WTM is higher in Britain than it is in many other countries, including several EU member states and particularly in comparison to countries in Central and Eastern Europe. Our findings also suggest that there is some evidence that local labour market conditions have an impact on an individual's WTM. In particular, those living in areas with poorer job prospects have a higher WTM, although those living in high wage areas display a higher WTM. However, given that other local level variables also influence attitudes towards migration and the fact that these variables are correlated, this affects the precision of the estimates of the sub-regional variables.

This paper has also shown that although the WTM is not generally low compared to people from most other countries, it is low amongst some sections of the British population. For example, one of the main findings is that educated people are far more willing to move longer distances, whereas there is less variation between qualification levels over shorter distances. A likely explanation for this finding is that graduates face lower psychic costs as they have been to university and hence have

already cut some of their ties with their local communities. Thus there may be a positive spillover from the UK government's aim to get 50 per cent of young people through higher and further education by 2010 since this should be conducive to improving labour mobility. Government initiatives more generally to increase educational attainment should also assist migration since it should reduce the reliance on the local area to find work. Our findings also provide some support to the housing market reforms recommended by OSWALD (1996) and HENLEY (1998) because of the higher WTM displayed by private renters. However, it is found that some of the effect of housing tenure is due to other variables which are correlated with housing tenure decisions.

Characteristics, as measured by the compositional effect, explain a relatively large amount of the differences in the attitudes towards migration in comparison to individuals living in other countries. This particularly applies to the WTM over longer distances, where the characteristics component dominates for 12 out of the 22 pairwise comparisons, and especially relative to Western economies. In contrast, institutional, historical and cultural factors appear to be more important for many countries in Central and Eastern Europe. The difference in the impact of education on the WTM between Western countries and those in Central and Eastern Europe shown in the country specific regressions is particularly noticeable.

One final policy issue related to these findings concerns immigration. In particular, if migration to take advantage of the better employment prospects in another part of the country is not viewed as an attractive proposition then immigration may be able to play a role in improving labour market efficiency. There is evidence in support of this argument from the US since BORJAS (2001b) finds that there is a disproportional movement of immigrants to high-wage areas and this movement

speeds up the process of regional wage convergence. This effect is accentuated by the ageing population in Britain, especially given the fact that older workers display a much lower WTM. Furthermore, BLANCHFLOWER *et al.* (2007) argue that the large influx of Eastern European migrants to the UK since EU enlargement has reduced inflationary pressures by filling labour shortages in some areas and exerting downward pressure on wages.

NOTES

[1] There are also regional differences in employment rates, which have mainly been caused by relatively high levels of economic inactivity, especially long-term sickness, in some peripheral regions (FOTHERGILL, 2001).

[2] See LONG *et al.* (1988) and LONG (1991) for a more detailed discussion of this issue.

[3] For example, OECD (1990) reports that migration rates in the UK in the 1970s and 1980s were generally of the order of 1 per cent. These statistics were generated using data from the Labour Force Survey. In contrast, it is reported in OECD (2000) that the migration rate for the UK in 1998 was 2.3 per cent. This is because a different data set, the National Health Service Central Register, is used to obtain this statistic.

[4] The achieved sample size in 1995 was 3633, although females were slightly over-represented. The higher proportion of females has been a feature of each *BSAS* since its introduction in 1983. A separate survey is carried out in Northern Ireland but is not analysed in the present study. Areas north of the Caledonian canal are also excluded because of their dispersed population. For further details of the sample design, see LILLEY *et al.* (1997).

[5] The 2003 *ISSP* also focused on national identity. Unfortunately, however, the questionnaire did not contain any questions on an individual's WTM, so it is not possible to use the 2003 survey in this way or to compare it with the 1995 survey. For a list of countries included in the ISSP see http://www.issp.org/members.shtml. However in any given year, some of the member countries may not participate in the survey. For example, Australia, Israel and Northern Ireland did not participate in the 1995 survey.

[6] Each individual who was identified to take part in the survey was allocated to the A, B or C third of the sample. Only those individuals allocated to the A version of the questionnaire were required to answer the questions on national identity and migration (LILLEY *et al.*, 1997).

[7] The precise wording of the questions from which this information is derived can be found in the Appendix. Questions were also asked on the WTM from Britain and Europe but these questions are not analysed here. Examples of the corresponding areas to counties in some other counties are also given in the Appendix.

[8] Interestingly, these rankings do change if the WTM country variable is analysed. For example, Americans are ranked 14th in terms of the WTM to another country. For a detailed examination of international differences in the willingness to emigrate, see DRINKWATER (2003). Unfortunately, no question on the WTM region is asked in Britain.

[9] Canadians have the 2nd highest WTM from their neighbourhood and town/city but their lower ranking in terms of their WTM further afield could be due to the fact that the next level specified in the Canadian questionnaire is province (13 in total). Therefore, given that Canada is such a vast country, especially compared to Great Britain, where the next level specified is county (64 in total), it is not surprising that the relative ranking of Canada falls.

[10] We are grateful to a referee for making this point. OLS estimates are also easier to interpret given that marginal effects from an ordered probit model need to be calculated for each outcome of the dependent variable. The ordered probit estimates are in fact very similar both in terms of the magnitude and significance of the individual variables. These estimates are available from the authors on request.

[11] The ethnic group dummy is included in specification 1, whilst the housing tenure dummies appear in specification 2 along with house prices. House prices relate to the average house price in each county, and are reported in pounds. This information has been obtained from the Halifax House Price Index.

[12] Earnings data relate to the gross average weekly earnings of full-time employees and have been taken from the New Earnings Survey. We use the unemployment-vacancy ratio as our measure of local job prospects because counties are not considered as self-contained labour markets and also because of the importance of vacancies in determining aggregate migration (JACKMAN and SAVOURI, 1992). Unemployment is measured by the claimant count and vacancies by the number of unfilled vacancies in the county. The economic activity rate relates to just the working age population and has been obtained from the Labour Force Survey.

[13] The raw difference between the mean WTM for private renters compared to owner occupiers is 0.435 for the WTM town/city and 0.528 for the WTM county, both of which are significantly different from zero at the 1 per cent level. Thus controlling for the other explanatory variables almost halves the difference in the WTM town/city regression and more than halves it in the WTM county regression. The p-value attached to the private renting dummy is 0.178 in the WTM town/city model and 0.228 in the WTM county model.

[14] There is some correlation between the variables included in Specification 3 because some of the crime dummies become significant if the population density variable is excluded.

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Table 1. Average willingness to move by country: 1995

	Neighbourhood		Town/City		County/Equiv. Area		
	Average	Rank	Average	Rank	Average	Rank	N
Austria	2.731	19	2.354	20	2.160	20	721
Britain	3.520	6	3.193	4	2.868	5	748
Bulgaria	2.810	16	2.737	14	2.552	14	796
Canada	3.797	2	3.376	2	2.916	4	1241
Czech Republic	3.062	14	2.517	19	2.427	16	844
East Germany	3.211	11	2.741	13	2.573	12	440
Hungary	2.610	21	2.296	21	2.019	21	777
Ireland	2.806	17	2.531	18	2.338	18	814
Italy	3.261	9	2.776	12	2.565	13	955
Japan	2.691	20	2.554	17	2.397	17	959
Latvia	2.188	22	1.919	23	1.704	23	751
Netherlands	3.584	4	3.317	3	3.019	2	1660
New Zealand	3.508	7	3.058	7	2.937	3	813
Norway	3.600	3	3.171	5	2.651	11	1163
Philippines	2.976	15	2.886	10	2.728	8	1058
Poland	3.081	13	2.688	15	2.538	15	782
Russia	2.124	23	1.987	22	1.705	22	1242
Slovakia	3.221	10	2.854	11	2.664	10	1121
Slovenia	2.791	18	2.601	16	2.330	19	855
Spain	3.136	12	3.000	8	2.759	7	979
Sweden	3.459	8	2.906	9	2.685	9	1017
United States	3.871	1	3.522	1	3.142	1	1088
West Germany	3.541	5	3.065	6	2.772	6	933

Source: *ISSP*

Notes: Region, state or province used instead of county for some countries - see the Data Appendix for examples. The varying size of these geographical units between countries is likely to make the comparison of this variable more difficult. The table just uses those observations in which individuals answer all three of the WTM questions.

Table 2. OLS estimates of the willingness to move, Britain: 1995

	Town/City			County		
	Spec. 1	Spec. 2	Spec. 3	Spec. 1	Spec. 2	Spec. 3
Female	-0.153	-0.174*	-0.186*	-0.248**	-0.247**	-0.257**
Aged 18-29	0.475**	0.383**	0.297*	0.242	0.124	0.062
Aged 30-44	0.359**	0.343**	0.252	0.219	0.171	0.083
Aged 45-54	0.350*	0.362**	0.263	0.177	0.146	0.101
Widowed/Divorced	0.292*	0.253	0.211	0.228	0.274**	0.308**
Single	0.013	-0.007	-0.004	-0.103	-0.086	-0.115
Number in household	-0.019	-0.021	-0.008	-0.052	-0.050	-0.036
Ethnic Minority	0.069	0.019	-0.144	0.043	0.003	-0.177
Unemployed	-0.015	-0.045	-0.060	0.013	0.030	-0.001
Inactive	-0.138	-0.163	-0.165	-0.063	-0.038	-0.066
Degree	0.044	0.032	-0.037	0.552***	0.525***	0.369**
Other higher education	0.001	0.060	0.048	0.175	0.166	0.114
A-levels	0.223	0.291	0.296	0.501***	0.530***	0.504***
O-levels	-0.042	0.016	0.013	0.118	0.181	0.176
CSE	-0.229	-0.167	-0.182	0.058	0.127	0.051
Foreign qualifications	-0.065	-0.006	-0.037	-0.422	-0.362	-0.421
No. of years spent in current town	-0.011***	-0.011***	-0.014***	-0.017***	-0.018***	-0.020***
North	0.314	_	_	0.657**	_	_
North West	0.418*	_	_	0.403*	_	_
Yorkshire and Humberside	0.304	_	_	0.218	_	_
East Midlands	0.124	_	_	0.072	_	_
West Midlands	0.250	_	_	0.181	_	_
East Anglia	0.223	_	_	0.358	_	_
South West	0.205	_	_	0.312	_	_
South East	0.196	_	_	0.224	_	_
Greater London	0.375	_	_	0.460*	_	_
Wales	0.324	_	_	0.265	_	_
Social housing	_	0.091	0.010	_	-0.084	-0.147
Renting privately	_	0.237	0.170	_	0.245	0.221
County unemp./vacancies ratio	_	0.024*	0.019	_	0.029**	0.025*
County earnings	_	0.006**	0.003	_	0.007**	0.003
County house prices/1000	_	-0.012**	-0.009*	_	-0.012**	-0.008
County activity rate		0.020	0.021		0.028	0.032**
Population density	_	_	0.004**	_	_	0.007***
Fairly high crime area	_	_	0.070	_	_	0.085
Average crime area	_	_	-0.040	_	_	-0.132
Fairly low crime area	_	_	-0.220	_	_	-0.165
Very low crime area	_	_	-0.310	_	_	-0.252
Constant	2.968***	0.176	0.869	2.893***	-0.815	-0.153
R-Squared	0.066	0.073	0.083	0.107	0.116	0.135
N	758	737	726	750	731	720

Source: *BSAS*

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed tests). The p-values are calculated using heteroscedastic consistent standard errors. The reference categories are aged 55-64, married, employed, no qualifications, Scotland, owner occupier and lives in what is perceived to be in very high crime area.

Table 3. Decomposition of the willingness to move: 1995

	Town/City			County/Equivalent Area		
	Total	Comp.	Struct.	Total	Comp.	Struct.
Austria	0.809	0.424	0.384	0.683	0.409	0.274
Bulgaria	0.437	0.187	0.250	0.321	0.161	0.160
Canada	-0.200	-0.062	-0.138	-0.047	-0.081	0.035
Czech Republic	0.654	0.230	0.424	0.459	0.196	0.264
East Germany	0.395	0.222	0.173	0.311	0.224	0.087
Hungary	0.879	0.240	0.640	0.863	0.280	0.584
Ireland	0.640	0.307	0.333	0.532	0.286	0.246
Italy	0.402	0.207	0.195	0.317	0.226	0.090
Japan	0.655	0.264	0.390	0.514	0.225	0.288
Latvia	1.235	0.334	0.901	1.156	0.274	0.882
Netherlands	-0.152	-0.124	-0.028	-0.148	-0.142	-0.006
New Zealand	0.110	0.012	0.098	-0.046	-0.080	0.034
Norway	0.017	0.030	-0.013	0.244	0.055	0.189
Philippines	0.292	0.114	0.177	0.151	-0.033	0.183
Poland	0.515	0.151	0.364	0.352	0.168	0.185
Russia	1.173	0.325	0.848	1.175	0.297	0.878
Slovakia	0.313	0.160	0.153	0.207	0.155	0.052
Slovenia	0.558	0.166	0.392	0.554	0.192	0.362
Spain	0.135	0.131	0.004	0.079	0.131	-0.053
Sweden	0.273	0.082	0.191	0.187	0.034	0.153
United States	-0.346	-0.131	-0.215	-0.257	-0.177	-0.080
West Germany	0.096	0.145	-0.049	0.083	0.133	-0.050

Source: *ISSP*

Notes: Decompositions are reported relative to Great Britain. The mean differentials in the WTM are slightly different from those reported in Table 1 because only individuals answering all three WTM questions are included in Table 1 and because of item non-response.

DATA APPENDIX

The WTM questions asked in the *BSAS/ISSP* were:

- If you could improve your work or living conditions, how willing or unwilling would you be to move to another *neighbourhood* or *village*?

  1. Very willing (recoded as 5)
  2. Fairly willing (recoded as 4)
  3. Neither willing nor unwilling (coded as 3)
  4. Fairly unwilling (recoded as 2)
  5. Very unwilling (recoded as 1)

- If you could improve your work or living conditions, how willing or unwilling would you be to move to another *town* or *city* within this county (different geographical area specified for some other countries in the *ISSP* – see below for examples)?

  1. Very willing (recoded as 5)
  2. Fairly willing (recoded as 4)
  3. Neither willing nor unwilling (coded as 3)
  4. Fairly unwilling (recoded as 2)
  5. Very unwilling (recoded as 1)

- If you could improve your work or living conditions, how willing or unwilling would you be to move to another *county* (different geographical area specified for other countries in the *ISSP* – see below for some examples)?

1. Very willing (recoded as 5)

2. Fairly willing (recoded as 4)

3. Neither willing nor unwilling (coded as 3)

4. Fairly unwilling (recoded as 2)

5. Very unwilling (recoded as 1)

The county-level equivalent areas specified in other countries include:

Province: New Zealand, Canada, Netherlands and the Philippines.

Region: Italy and Slovenia.

States: United States

Table A1. Means of explanatory variables

	Britain	Other Countries
Female	0.579	0.523
Aged 16/18-29	0.269	0.243
Aged 30-44	0.395	0.382
Aged 45-54	0.190	0.210
Aged 55-64	0.146	0.166
Married	0.627	0.691
Widowed/Divorced	0.140	0.081
Single	0.233	0.229
Number in household	2.815	3.453
Ethnic Minority	0.028	_
Employed	0.683	0.655
Unemployed	0.079	0.067
Inactive	0.238	0.278
Completed university (Degree)	0.121	0.135
Semi higher (Further/other higher education)	0.149	0.126
Completed secondary (O levels/GCSE and A levels)	0.401	0.331
Incomplete secondary (CSE)	0.100	0.211
No qualifications	0.229	0.197
No. of years spent in current town	22.054	24.743
North	0.054	_
North West	0.095	_
Yorkshire and Humberside	0.096	_
East Midlands	0.081	_
West Midlands	0.105	_
East Anglia	0.045	_
South West	0.103	_
South East	0.200	_
Greater London	0.095	_
Wales	0.045	_
Scotland	0.080	_
Owner Occupier	0.680	_
Social housing	0.215	_
Renting privately	0.105	_
Unemployment-vacancy ratio	16.610	_
Weekly earnings	326.750	_
House prices	74191.490	_
Economic activity rate	78.440	_
Population density	25.000	_
Very high crime area	0.118	_
Fairly high crime area	0.136	_
Average crime area	0.351	_
Fairly low crime area	0.255	_
Very low crime area	0.139	_
N	726	20442

Sources: *BSAS* and *ISSP*

Notes: An indication of the percentage of respondents from each country for each of the *ISSP* models can be obtained from Table 1. Educational qualifications in other countries in the *ISSP* have been recoded so that they are roughly equivalent to UK qualifications (see Drinkwater, 2003, for further details).

Table A2. OLS estimates of the willingness to move town/city: By country

	Austria	Britain	Bulgaria	Canada	Czech Rep.	East Germany	Hungary	Ireland	Italy	Japan	Latvia	Neth.
Female	0.039	-0.174*	-0.017	-0.191***	-0.068	0.085	-0.097	0.203*	0.030	-0.047	0.011	-0.027
Aged 16-29	0.546**	0.496***	0.423*	0.166	0.434**	-0.086	0.681***	0.524**	0.447*	0.423**	0.347*	0.266*
Aged 30-44	0.368*	0.321*	0.007	-0.100	0.296*	-0.168	0.358**	0.270*	0.133	0.594***	0.264*	0.099
Aged 45-54	0.218	0.308*	-0.184	-0.163	0.248	-0.218	0.332**	-0.074	-0.072	0.424***	0.153	0.164
Widowed/Divorced	0.240	0.249	0.354*	0.307**	0.218	0.342	0.151	0.438	0.616*	0.168	0.003	-0.042
Single	0.577***	0.001	-0.086	0.040	0.203	0.413*	-0.104	0.414***	0.219	0.367**	0.103	-0.017
Number in household	-0.047	-0.013	0.017	-0.004	-0.009	0.053	-0.032	0.030	0.075*	-0.109***	0.028	-0.022
Unemployed	-0.120	-0.027	-0.033	0.542***	0.139	0.331*	0.095	0.415**	0.515*	0.171	-0.159	-0.029
Inactive	0.043	-0.155	-0.429**	-0.017	0.153	-0.002	-0.163	0.135	0.172	0.225**	0.086	0.088
Completed university	0.659**	0.039	0.454***	0.346**	0.106	1.136***	0.157	0.258	0.403**	0.353**	-0.267	0.613***
Semi-higher	_	-0.035	0.505***	0.320**	-0.045	0.631**	0.134	0.248	0.280	0.231	-0.143	0.664***
Completed Secondary	0.642***	0.010	0.285**	0.240	0.219	0.520**	0.109	0.122	0.100	0.070	-0.332**	0.347***
Incomplete Secondary	0.231**	-0.237	0.525*	0.335**	0.043	0.525***	0.032	-0.120	-0.061	0.463**	-0.267	0.211*
Years in current town	-0.005	-0.011***	-0.018***	-0.015***	-0.016***	-0.011**	-0.013***	-0.023***	-0.017***	-0.016***	-0.018***	-0.017***
Constant	1.913***	3.280***	3.009***	3.496***	2.586***	2.415***	2.459***	2.484***	2.626***	2.680***	2.351***	3.328***
R-Squared	0.139	0.054	0.127	0.072	0.080	0.122	0.100	0.175	0.112	0.172	0.076	0.105
N	711	753	754	1186	839	430	767	803	940	914	761	1540

Table A2 (Continued)

	New Zealand	Norway	Philippines	Poland	Russia	Slovakia	Slovenia	Spain	Sweden	United States	West Germany
Female	-0.105	-0.038	-0.103	-0.073	-0.035	-0.031	0.116	0.066	-0.001	0.059	0.062
Aged 16-29	0.727***	0.405**	0.489***	0.435*	0.311**	0.561***	1.040***	0.903***	0.366**	0.688***	0.536***
Aged 30-44	0.305**	0.224	0.316**	0.286	0.080	0.377**	0.643***	0.667***	0.083	0.445***	0.239*
Aged 45-54	0.294*	0.162	0.203	0.245	0.033	0.184	0.479***	0.713***	0.278*	0.265	0.231
Widowed/Divorced	-0.037	0.092	0.107	0.209	0.264**	0.145	-0.097	-0.216	0.094	0.063	0.127
Single	-0.135	0.046	-0.001	0.327*	0.270**	0.050	0.068	0.060	0.037	0.005	0.019
Number in household	-0.019	-0.041	0.011	0.030	0.033	-0.033	-0.055*	-0.002	-0.062*	0.041	-0.055*
Unemployed	-0.140	0.086	-0.043	0.070	0.343**	0.248	0.212	0.328**	-0.190	-0.024	0.158
Inactive	-0.061	0.260***	-0.091	-0.059	-0.118	-0.173	-0.204	-0.034	0.103	0.036	0.183*
Completed university	0.520*	0.169	0.519	-0.135	-0.620***	0.110	0.723***	0.466***	0.457***	0.088	0.869***
Semi-higher	0.842***	0.222	0.469***	0.073	-0.293	0.721***	0.631***	0.181	0.623***	-0.127	0.648***
Completed Secondary	0.687***	0.251*	0.218**	-0.061	-0.391*	0.029	0.546***	0.296**	0.245*	-0.019	0.341**
Incomplete Secondary	0.682***	0.127	0.193*	0.092	-0.404*	0.053	0.661***	0.215	0.133	-0.127	0.319***
Years in current town	-0.015***	-0.017***	0.474**	-0.007*	-0.016***	-0.024***	-0.001	-0.009**	-0.016***	-0.005	-0.007**
Constant	2.540***	3.201***	1.434***	2.483***	2.544***	3.218***	1.743***	2.440***	2.978***	3.059***	2.807***
R-Squared	0.085	0.106	0.040	0.056	0.119	0.147	0.166	0.108	0.099	0.039	0.106
N	778	1152	1023	832	1235	1096	823	869	1017	1074	898

Source: *ISSP*

Notes: Household size has been estimated for the Netherlands using the household composition variable. No information on semi-higher education is available in Austria. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed tests). The p-values are calculated using heteroscedastic consistent standard errors.

Table A3. OLS estimates of the willingness to move county/equivalent area: By country

	Austria	Britain	Bulgaria	Canada	Czech Rep.	East Germany	Hungary	Ireland	Italy	Japan	Latvia	Neth.
Female	-0.073	-0.254**	-0.152	-0.145*	-0.148	-0.050	-0.184	0.011	-0.075	0.023	-0.031	-0.041
Aged 16-29	0.544**	0.217	0.343	0.230	0.160	-0.180	0.606***	0.476**	0.214	0.329*	0.076	0.162
Aged 30-44	0.300	0.200	-0.011	-0.088	0.184	-0.166	0.486***	0.210	0.199	0.325**	0.051	0.075
Aged 45-54	0.108	0.151	-0.224	-0.153	0.295**	-0.156	0.286**	0.046	0.111	0.346***	0.077	0.182
Widowed/Divorced	0.054	0.161	0.497**	0.215	0.285*	0.236	0.116	0.591*	0.294	0.130	0.193	-0.032
Single	0.386**	-0.136	-0.055	-0.018	0.331**	0.329*	-0.100	0.422***	0.238	0.335**	0.286**	-0.045
Number in household	-0.037	-0.071	0.029	-0.018	0.013	0.004	-0.035	0.011	0.071*	-0.130***	0.092***	-0.025
Unemployed	-0.018	-0.001	0.179	0.261	0.483	0.079	-0.173	0.305*	0.451	0.254	-0.106	0.109
Inactive	0.134	-0.089	-0.261	-0.040	0.152	-0.117	-0.101	0.130	0.016	0.303***	0.151	0.112
Completed university	0.867***	0.573***	0.481***	0.380**	0.260	0.786***	0.443	0.188	0.507***	0.591***	-0.116	0.653***
Semi-higher	_	0.127	0.502***	0.326*	0.022	0.565**	0.405**	0.231	0.487**	0.368***	-0.126	0.604***
Completed Secondary	0.734***	0.256*	0.161	0.185	0.341**	0.755***	0.208*	0.032	0.215*	0.135	-0.206	0.245***
Incomplete Secondary	0.229*	0.058	0.355	0.282	0.065	0.461**	0.112	-0.275*	0.108	0.443**	-0.393**	0.175
Years in current town	-0.001	-0.016***	-0.014***	-0.013***	-0.020***	-0.012**	-0.008**	-0.027***	-0.013***	-0.015***	-0.010***	-0.018***
Constant	1.704***	3.256***	2.733***	3.070***	2.560***	2.570***	1.997***	2.680***	2.340***	2.568***	1.749***	3.125***
R-Squared	0.126	0.086	0.101	0.050	0.096	0.098	0.089	0.183	0.080	0.173	0.050	0.096
N	755	747	748	1170	856	433	767	803	934	912	756	1539

Table A3 (Continued)

	New Zealand	Norway	Philippines	Poland	Russia	Slovakia	Slovenia	Spain	Sweden	United States	West Germany
Female	-0.076	-0.055	-0.148*	-0.130	-0.093	-0.050	0.034	0.013	0.037	-0.072	0.045
Aged 16-29	0.356*	0.340*	0.518***	0.479**	0.275***	0.458**	0.603***	0.872***	0.417**	0.596***	0.272
Aged 30-44	0.223	0.281*	0.339***	0.320**	0.069	0.350**	0.440***	0.614***	0.134	0.242	0.200
Aged 45-54	0.305*	0.196	0.324**	0.254*	0.144*	0.176	0.364**	0.720***	0.436***	0.222	0.164
Widowed/Divorced	-0.068	0.094	0.015	0.275	-0.051	0.194	-0.283	-0.345	-0.160	0.073	0.208
Single	-0.022	0.043	-0.032	0.118	0.044	0.065	0.322**	-0.000	0.166	0.076	0.113
Number in household	0.023	-0.033	0.037**	-0.007	0.030	-0.039	-0.070**	-0.006	-0.068	-0.022	-0.009
Unemployed	0.139	0.136	-0.118	0.093	0.196*	0.353**	0.245	0.272*	-0.038	-0.184	-0.021
Inactive	-0.049	0.285***	-0.003	-0.048	-0.065	-0.061	-0.117	-0.040	0.142	0.099	0.117
Completed university	0.523*	0.215	0.659**	0.264	-0.292	0.174	0.545***	0.446***	0.407***	0.524*	1.015***
Semi-higher	0.784***	0.292*	0.334***	-0.134	-0.207	0.947***	0.520**	0.317	0.417**	0.328	0.442**
Completed Secondary	0.556**	0.302**	0.108	0.060	-0.201	0.124	0.483***	0.350**	0.239*	0.286	0.362**
Incomplete Secondary	0.623**	0.040	0.262**	0.091	-0.250	0.081	0.408*	0.277*	0.098	0.103	0.310***
Years in current town	-0.015***	-0.016***	0.178	-0.010***	-0.011***	-0.023***	-0.004	-0.010**	-0.011***	-0.008**	-0.006*
Constant	2.371***	2.598***	1.740***	2.529***	2.078***	2.985***	1.861***	2.326**	2.584***	2.701***	2.427***
R-Squared	0.054	0.100	0.038	0.059	0.069	0.123	0.127	0.104	0.083	0.035	0.086
N	782	1135	1017	1128	1236	1107	825	870	1014	1071	904

Source: *ISSP*

Notes: Household size has been estimated for the Netherlands using the household composition variable. No information on semi-higher education is available in Austria. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed tests). The p-values are calculated using heteroscedastic consistent standard errors.